

**"Batteaux and 'Battoe Men':
An American Colonial Response to the
Problem of Logistics in Mountain Warfare"**

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Mountains, and the strategic corridors through them, were the central geographic conditions of colonial North America. The great mountain chain that rises just south of the Saint Lawrence River and parallels the Atlantic seaboard - combining the White and Green Mountains of New England, the Adirondack, Helderberg, and Catskill Mountains of New York, and the Alleghenies and Great Smokies of the Middle Atlantic and Southern colonies - comprised an impenetrable physical barrier a thousand miles in length that separated the coastal plain from the continental interior. This barrier, known collectively as the Appalachian mountain chain, was passable at water level in only two places where river corridors permitted transit to the lands beyond. As the late Edward Hamilton observed, "These two corridors were to become the great strategic routes of North America, the easy routes for trade and, practically speaking, the only ones for military effort."¹

Most important in the colonial period was the north-south corridor formed by the Hudson and Champlain valleys. Extending from tidewater on the Atlantic, it intersected the mountain barrier and continued into the heart of French Canada, to tidewater on the Saint Lawrence. Although the mountains sometimes pressed up to the water's edge, nowhere along their length did the lakes and rivers themselves reach an elevation of more than two hundred feet above sea level. The few barriers to travel, shallows and portage places, "were minor in view of the immense strategic importance of this vital waterway."²

From the Richelieu River, the narrow waters of Lake Champlain ran southward between the mountains for a hundred miles without obstruction. Just west of Lake Champlain and its tributary, Lake George, the Hudson River passes within sixteen miles of the Champlain/Saint Lawrence watershed, then flows southward, "stretching almost like a tightened string," through the Catskills until reaching the Atlantic Ocean at New York City.³

The second strategic corridor ran east to west from the Hudson River to the Great Lakes, extending from the confluence of the Mohawk and Hudson Rivers westward to Wood Creek and thence via Lake Oneida and the Oswego River to Lake Ontario. Beyond lay the Niagara River, Lake Erie, the Ohio Valley, and the vast continental interior.⁴

Because these strategic river corridors were located within its boundaries, the Province of New York became a principal theater of colonial warfare. The Iroquois Indians knew it as the "Warpath of Nations," while Chancellor James Kent referred to New York as the "Flanders of America," doomed by its geography to be a continuous cockpit of conflict. Indeed, from 1689 to

1815, New York was the central stage upon which were fought four colonial wars (King William's War 1689-1698, Queen Anne's War 1702-1713, King George's War 1744-1748, and the French and Indian War 1754-1763), the American Revolutionary War (1775-1783), and a second war (1812-1815) against the former colonial power.⁵

The European colonial powers, France and Great Britain, and subsequently the revolutionary Americans and the fledgling United States, sought to control the strategic river corridors by constructing forts at portages, narrows, and other "choke points." Examples include: Forts Crown Point and Carillon (Ticonderoga) on Lake Champlain, Forts George and William Henry on Lake George and Fort Edward on the Hudson River at the "Great Carrying Place," Fort Stanwix at the "Oneida Carry," Fort Ontario on the Oswego River, and Fort Niagara on Lake Ontario.⁶

None of these were places of great strength by European standards. Most of the rather primitive fortifications could be reduced with relative ease provided the attacking force could reach the fortified place with the requisite troops, artillery, and supplies.⁷ Thus the critical factor in all the colonial campaigns was logistics. The solution, in an environment of mountains, primeval forests, and the virtual absence of road-net, lay on the river corridors themselves and on the indigenous colonial water-craft called the batteau.

The batteau was a flat-bottom, double-ended, shallow-draft, all-purpose cargo boat.⁸ First appearing in the records as early as King William's War, by the eighteenth century batteaux were the most common and most important cargo carrier found on the inland waters of colonial North America. The names, from the French batteau, "boat," and batteaux, "boats," were commonly rendered in English as "battoe" and "battoes." Thousands of batteaux were constructed by British, French, and American forces and used in the river corridors of New York in all the colonial wars, the American Revolutionary War, and the War of 1812.

Batteaux were built at various costs to various specifications. In 1755, Major General William Johnson paid £9 each for the construction of large batteaux, £6.10 to £10 for medium sized batteaux and £5 each for small batteaux.⁹ The smaller batteaux, sometimes called "Albany batteaux" or "Albany boats" were "abt. 24 ft. long" with a beam measuring only three feet. The larger batteaux, sometimes called "Schenectady batteaux" or "Schenectady boats," because they were constructed at that village for use on the Mohawk River and ultimately the Great Lakes, may have been as large as forty-five feet in length, the upper limit for colonial batteaux identified by small

craft historian Howard Chapelle.¹⁰ Batteaux in the thirty foot range appear to have been the more common. The only extant plan of a batteau, drawn for the British Admiralty in 1776, shows a boat 30'4" in length, with a 6'6" beam and a depth of 2'10".¹¹

Oars were the primary means of propulsion for the batteau, although, in open water, sails or improvised sails were sometimes used, and, in shallow waters, they were often poled. In 1755, Gerret Lansing, of Albany, supplied "oars...Large Padles...short Padles and Poles with Iron [tips]" for batteaux to be used in the campaign against Crown Point.¹² In 1758, orders for the expedition against Ticonderoga required "Commanding officers & Regiments to employ their carpenters in making oars, paddles, & scoops," for bailing the batteaux, since "Each boat will be allow'd from Colonel Bradstreet, only five oars."¹³ The New England surgeon, Dr. Caleb Rea, confirms that there were five oars in his batteau, four apparently for rowing and one to serve as a rudder.¹⁴

This apparently typical use of oars as rudders is seen in the painting of Major General Jeffrey Amherst's army passing the rapids of the Saint Lawrence in 1760. The artist, Lieutenant Thomas Davies, an officer with the army, shows several batteaux using an oar for a rudder. Most of the batteaux [probably large 'Schenectady Boats'] have six oars for rowing.¹⁵ During the Burgoyne campaign of 1777, British batteaux were also "propelled by six oars, [while] a seventh served as a rudder."¹⁶

In open water, batteaux were sometimes sailed, although they were rarely able to do more than run before the wind. When the point of sail was downwind, this technique could reduce the men's labor on the oars considerably. "Lakes Champlain and George [and the Hudson River] were especially suited to the sailing of batteaux as winds are predominately north or south which were the main directions of travel."¹⁷ Dr. Rea recorded that during the retreat from Fort Carillon in 1758, "we made Sails of Blankets and Tents."¹⁸ The following year on Lake Champlain, General Amherst ordered training in the technique. On 1 October 1759 each of the regular regiments was directed to send a "Serjeant or aproper person" to the place "where the boats ly, to see a Boat Rigged there with two Blanketts for Sails, and each Regiment to Rigge 2 Batteaux in the same Manner." A week later, orders stated that the batteaux were "to have their Sails fixed accordingly to the Pateron Collo. Haviland approved of." From these examples it appears that such "field expedient" sails were in common use during the French and Indian War.¹⁹

Numerous contemporary references give evidence of the load-carrying capacity of colonial

batteaux. In 1755, a twenty-four foot batteau was reported to "carry 8 barrells and 5 men." If each barrel was of standard size, four and two tenths cubic feet, this would yield a total of thirty-two and eight tenths cubic feet, a substantial payload.²⁰

Bougainville recorded in his journal that batteaux arriving at Fort Carillon in 1756 each carried three tons. These, of course, were French or "Montreal" batteaux, built for use on the Saint Lawrence River and the Great Lakes.²¹

John Lees, an English merchant living in Quebec, wrote, in 1768, that "The Schenectady Batteaus...hold at most 14 Rum Barls" and that there was "another kind of Batteau...which they call a French one and Carries about double the quantity of the others."²²

The substantial cargo capacity of large batteaux built for Johnson's 1755 campaign is indicated in the specifications drawn up for transport of the artillery train. Six 18 pounders were to be transported in "6 Large Strong Battoes." Each of the 18 pounders weighed approximately 4,700 pounds. Thus, it is apparent that the large British batteaux were capable of carrying well over two tons.²³

Smaller batteaux were used to transport provisions and troops during campaigns. During Abercromby's expedition of 1758, batteaux were ordered to be loaded with "eight barrels of flour or six of pork" in addition to crew and troops.²⁴

In 1759, Josiah Goodrich recorded in his journal that "Each battoo Will Carry 12 barriels of flower or 9 of poark When ordered to Load And it is supposed they will have About 20 men or a few more or less."²⁵

Sergeant David Holden of the Massachusetts Bay Provincial Regiment, in 1760, noted "We took Battoes with 7 men to a boat...Loaded our boats with 30 Barrils of flower. Or 25 of Pork Pees or Rice," for a voyage up the Hudson River to Fort Edward. During the advance on Ile-aux-Noix, he recorded that each batteau was to carry "5 Barrils of flower & 3 of Pork...as well as [the] number of troops...assigned to the boat."²⁶

Considerable care was taken in loading batteaux. Barrels were laid on their sides and cushioned on a bed of "fashens" [fascines], or loose brush that was placed in the bottom of the batteau. Captain Moneypenny recorded in his orderly book: "Care to be taken that none of the barrells put in the boats stand on their heads."²⁷ Additional protection was offered by placing the cargo under a water-proof covering. In 1755, seventy-three "Painted Canvases for Covering

Provisions & Ammunition" were listed among William Johnson's batteaux supplies.²⁸ In the Abercromby expedition of 1758, "oil cloths" were specified.²⁹ In 1776, the Commissary General in Canada directed that "no cask should come here larger than a barrel which are calculated for our Carts and Batteaux." Thus it appears that batteaux were developed to carry loads of specific size calculated in multiples of barrels. When used solely as a troop carrier and possibly with a few individual provisions, it was possible to carry thirty-two to forty men in a batteau.³⁰

Two batteaux, assumed to be from the Abercromby flotilla of 1758, were recovered from the south end of Lake George in 1962 and are now in the collections of the Adirondack Museum in Blue Mountain Lake, New York, and the New York State Museum in Albany, New York. Dennis M. Lewis, whose research report was commissioned by the State Museum, described the archeological remains of the two vessels:

Two batteaux of the French and Indian War period ...measure 32 feet in length by four feet across the beam. They were of carvel construction [in which] the hull planking is laid one on top of the other with the edge on one plank butting against the edge of the plank below it [although] some batteaux may have been built using lapstrake construction...characterized by the narrow overlapping of the side planks. The side planks were attached to knees, which in turn were attached to the bottom. It appears that most batteaux were iron fastened.

The Lake George batteaux...retain their original bottoms, stern, stern piece, some knees, and a little side planking. Four planks made up the thirty-two foot bottom. Each plank is a little over one foot wide and they are layed side by side. Cleats run across these planks between the knees and are nailed to the bottom planks. The stem and stern piece have a bevel cut on each side to facilitate the nailing of the side planks. The side planks are also nailed to the knees.³¹

The 1776 Admiralty plan specifies the materials to be used in the construction of a thirty-foot batteau. "All the wood will be soft except for an oak six inch plank on the bottom and the stem and stern pieces, which are also to be of oak. The bottom plank were to be one inch thick, the sides one and one half inches, and the knees two inches thick." The plan also shows nine thwarts [seats] "that scale out at being eight inches wide, two feet three inches apart and two feet off the bottom."³²

Because of their relatively crude construction, the vessels' seams required constant caulking in order to keep them water-tight. Caulking with oakum was a frequent fatigue duty for soldiers on campaign. In the endless effort to keep seams water-tight, batteaux were frequently filled with water, or even sunk, when circumstances permitted, so that their planks would swell to close the

seams.³³

The very simplicity of the batteaux permitted them to be built in large numbers by unskilled or semi-skilled workers and to be readily maintained and repaired or replaced in the field with relative ease.³⁴ Lewis concluded: "In the context of the eighteenth century transportation system that functioned along the [Hudson] Champlain waterway the batteau was an ideal water craft...capable of carrying large quantities of men and supplies through the roadless wilderness with a minimum of problems."³⁵

To man the thousands of batteaux constructed during the last great colonial war, the British created a "Battoe Service," usually referred to, after its creator and commander, as "Bradstreet's Battoemen." Like their contemporary sister organization, "Rogers' Rangers," the batteamen have yet to be the subject of a scholarly study. It remains unclear even whether they were soldiers or civilians. First authorized in 1755 by Sir William Shirley, the batteamen were raised and commanded by Captain (later Lieut. Col.) John Bradstreet³⁶ and were responsible for the construction and operation of the thousands of batteaux that moved the supplies, equipment, and men of the British and colonial forces up and down the Hudson/Champlain and Mohawk River corridors.³⁷

Shirley made an excellent appointment when he designated Lieut. Col. John Bradstreet to be in charge of the difficult and often dangerous task of keeping supplies moving from Schenectady to Oswego. Bradstreet was given command of a corps of 2,000 fighting bateaumen organized in forty companies. He was to supervise the construction of hundreds of bateaus and whaleboats for the army's use, the employment of wagons and sledges for moving bulky supplies over the several portages, and the clearing of any obstructions from the shallow waterways.³⁸

Douglas Edward Leach points out that two of Bradstreet's companies were made up of Nantucket whalers and others were drawn from the coastal towns above Boston.³⁹ However Shirley's references to the "Albany Men" suggests that a substantial portion of the batteamen came from that city.⁴⁰

The bateau-men, apparently largely drawn from the Albany, Schenectady, and Mohawk River area, were a breed apart. Their "grousing, strikes...desertions...unquenchable thirsts...insatiable appetites" and "willingness to rifle any cargo" made them, to say the least, rather difficult to command. Not surprisingly, many British officers found them impossible to work with; but Bradstreet developed an excellent rapport with them, no doubt at least in part because of his own reckless disposition and Nova Scotia frontier background.⁴¹

The creation of the Batteaux Service, like that of other irregular military organizations, was a response to a specific need. In the spring of 1756, Shirley found the post at Oswego on Lake Ontario to be at the end of a long, tenuous supply line. Indeed, the isolated garrison had barely survived the winter.

On March 17, 1756 Governor Shirley placed all the bateau-men involved in Oswego's provisioning under the command of Lieutenant Colonel Bradstreet. He was authorized to assume control over all aspects of the transportation of men and provisions from the construction of bateaux through to the delivery of goods to Oswego was placed directly in his hands.⁴²

Shirley authorized Bradstreet to "engage" 2,000 bateaumen to be organized in 50 man "companies," although it is unclear whether they were hired as civilians or recruited as soldiers. Bradstreet was ordered to proceed "as soon as may be with Two Hundred Whaleboats and the Same Number of Battoes all loaded with provisions and store" for the relief of Oswego.

Bradstreet undertook his new responsibilities with his usual energy. On 6 April 1756 he reported to Shirley "I have this day got of the remainder of the two hundred whaleboats and many battoos and I shall get the rest and myself gone in three days."⁴³ True to his word, Bradstreet reported on 9 April that he had left Albany and was moving toward Oswego which the convoy finally reached on 16 May.⁴⁴

Bradstreet could not delay long at Oswego. By the morning of 18 May he was on his way back to Schenectady where he immediately set about organizing the next convoy. To sustain the garrison at Oswego a continuous flow of provisions, tools, and weapons as well as supplies and equipment for the British vessels on Lake Ontario was required. On 1 July, Bradstreet led 600 bateaux into Oswego loaded "with Provisions for the Garrison and Guns and Rigging for the Vessels."⁴⁵

The Batteaux Service had successfully opened the supply line to Fort Oswego. Meanwhile, however, a French force of unknown size had commenced operations south of Lake Ontario designed to isolate the post again. "Bradstreet's Batteaumen" would add a hard-fought victory to their reputation for delivering the goods.

On 3 July 1756, Bradstreet again left Oswego for Schenectady with 350 bateaux and about 1,000 batteamen. Eight miles from the post the convoy fell into an ambush. The French and Indian force, consisting of about 180 French marines, 450 Canadian militia, and 100 Indians, lay in wait on

the north side of the Oswego river. Allowing the first few batteaux to pass unmolested, they struck the advance body of the convoy which included Bradstreet and about 300 Batteauxmen.⁴⁶

Bradstreet and his batteauxmen recovered quickly from the initial surprise. Bradstreet himself, with six men, occupied a small island and from it beat back three attempts by the French to cross the river. His stubborn defense covered the remaining batteauxmen, giving them time to get ashore on the south side of the river where hasty defensive positions were organized. Bradstreet then withdrew to the safety of the south shore. There he was informed that the French were attempting to flank him by crossing the river about a mile upstream. Hurriedly collecting some 250 batteauxmen, Bradstreet hastened to the threatened point, hoping to prevent the French crossing, only to find about 400 French and Indians had already crossed.

Bradstreet attacked without hesitation, driving the enemy back to the river where "the Battoemen having now a fair View of them, took them down fast; and here it was that the Enemy sustained their greatest loss."⁴⁷ Pursuing the French across the river, the batteauxmen found the entire French party had withdrawn "in the utmost Haste and Confusion, for they had left behind their Packs, Blankets and Provisions."⁴⁸ British casualties in the three-hour engagement were twenty men killed and twenty-four wounded, mostly in the opening fusillade. Bradstreet estimated the number of French and Indian dead at over one hundred, though the French commander, Captain de Villiers, reported "we lost in this affair a colony officer, six Canadians and colony soldiers and one Indian."⁴⁹

In reporting the action, Hugh Gaine, editor of the New York Mercury, remarked on the wisdom "of taking large numbers of Battoemen into the service," and praised Bradstreet's "active, brave and Circumspect Behaviour."⁵⁰

Bradstreet's biographer concluded:

Dispite the nature of the surprise attack, Bradstreet's bateaux convoy had not been cut to ribbons but had remained intact...The action proved that given leadership such as that offered by Bradstreet, the bateau-men were capable of withstanding...attacks...in the face of sizable enemy forces.⁵¹

Despite this triumph, however, General James Abercromby, concerned with the spiraling cost of logistics, mandated reduction in the size of the Batteaux Service by ordering the discharge of 400 batteauxmen. The frustrated Bradstreet lacked "even the money necessary to pay the bateau-men" and so was forced to petition Lord Loudoun, the new British Commander-in-Chief, "for an additional £9,000 sterling since the recently granted sum of £4,800 New York currency, was not

sufficient to meet the wages and other expenses of the bateau-men."⁵²

During the last half of 1756 the batteaumen were paid off and disbanded. By 4 December when the last companies were paid off, the Batteaux Service had cost £77,666/6/3 New York Currency, a substantial expense. Bradstreet wrote to his agent, Charles Gould, in London that although "the Battoe service" had won "the approbation & satisfaction of all," his appointment as bateaux commander would terminate in December with the final disbanding of the last remaining batteaux companies.⁵³

Bradstreet was down but not out. One year later, in December 1757, with his eye on British offensive plans for 1758, Bradstreet proposed the reconstitution of the Batteaux Service on a scale twice that of the previous establishment.

Bradstreet argued that the mountainous and forested "nature of this country," made the movement of men and supplies "by Water and through woods" essential. He urged "that the Crown during the War, establish and keep up four thousand Chosen and well regulated Men accustom'd to the Woods and management of all kinds of Boats to be form'd into Companys." The batteaumen were to be recruited by the various colonies "in their several proportions from New Hampshire to Pensilvania." Experienced batteaumen would be induced to enlist by a pay scale for "Private Men" that offered "six pence per Day over and above what a Common Soldier receives." Non-commissioned officers were to receive proportionally greater remuneration. Bradstreet believed that the extra money was necessary because of the added responsibilities expected to be shouldered by the batteaumen. They would be expected to maintain the logistical system of the army and to transport regular and provincial troops and their supplies through the mountainous wilderness despite the "formadable and destructive" opposition of the French and their Indian allies. To Bradstreet the inflated pay scale, while seemingly "extravagant and unnecessary," was rather an "oeconomy and a necessary and prudent measure."⁵⁴

As for the officers to command such special forces, Bradstreet also had specific recommendations. They must be "Natives of this Country in General from the Peoples apprehensions and fears of Serving under European Officers" and "well acquainted with the woods, the nature of the Indians and the management of Boats."⁵⁵ As his biographer has observed, "Bradstreet had...deliberately fitted his background, abilities and past actions with what appeared to be the new British military needs in North America."⁵⁶

On 27 December 1757, Bradstreet was named Deputy Quartermaster-General for North America and was promoted to the rank of Lieutenant-Colonel. "His expertise with the bateau-men, his organizational abilities in terms of provisioning the forces, constructing boats, and arranging troop transports had proved his worth."⁵⁷

Bradstreet and his batteauxmen played a significant role in the campaign of 1758 from the very beginning. Despite myriad difficulties, 250 bateaux were constructed at Albany before the end of March and Bradstreet confidently promised an additional 1,200 completions by mid-May. By 22 May 1758, he had delivered, as promised, 1,500 batteaux. This means that Bradstreet was supervising the completion of 120 batteaux per week at Albany during the two month period April-May 1758, a remarkable achievement.⁵⁸

Sluggish recruitment of batteauxmen needed to man the new boats was belatedly stimulated by Abercromby's reluctant acceptance of the higher pay scale suggested by Bradstreet. Although never recruited up to full strength, the reconstituted Batteaux Service accomplished considerable feats during the campaign of 1758. Abercromby's army and attendant supplies were transported north on the Hudson River to Fort Edward, portaged to the entrenched camp at Lake George, and launched, in 900 batteaux and 135 whaleboats, against Fort Carillon. Following Abercromby's disastrous frontal assault on the French lines, the army, with all its artillery and hundreds of wounded, was successfully moved back to the south end of the lake.⁵⁹

Authorized to conduct a strike against Fort Frontenac [Caderaqui], Bradstreet's expedition with all its supplies were transported west on the Mohawk River, portaged across the Oneida Carry, and launched across Lake Ontario by a force of 300 batteauxmen reinforced by drafts out of one of the Massachusetts Bay provincial regiments.⁶⁰

The early months of 1759 saw Bradstreet back in Albany, involved again in preparations for the coming spring campaign and "the tasks he knew so well - bateaux building, procuring bateau-men, carpenters, wagoners & ox team drivers."⁶¹ Yet charges of corruption and profiteering plagued Bradstreet's administration of the Quartermaster's Department and the Batteaux Service. "Rumors abounded concerning Bradstreet being in cahoots with some of the shady traders, boatbuilders, wagoners and bateauxmen with whom he contracted the business of his department."⁶²

Bradstreet encountered other problems as well. In the spring of 1760, the British army's preparations for its final campaign were hampered by the large number of civilians moving westward

"in order to Trade with the Indians." Wages commanded by batteaumen were so extravagant that they threatened to "induce & carry off every good Battoe Man upon the Mohawk River which is evidently to the great prejudice of His Majesty's Service."⁶³ Moreover, even the regimental sutlers were tempting batteaumen as they loaded "their Battoes one half with Indian goods."⁶⁴ Logistic support for Amherst's final pincers movement against the last French stronghold at Montreal was handicapped by the lack of skilled batteaumen.⁶⁵

With the end of hostilities, Bradstreet, like Robert Rogers of the Rangers, found himself wrestling with a long "paper trail" of accounts and expenditures related to the Batteaux Service that now had to be justified to the parsimonious peacetime administration of General Thomas Gage.⁶⁶ Despite a brief revival during the northwest Indian insurrection of 1763-1765, the days of the Batteaux Service, like those of the rangers, were over.

During the eighteenth century, the American colonies developed both a technological and a "human resource" solution to the overriding problem of logistics in a mountainous wilderness: the widespread employment of a simple, crudely constructed, easily replaced, indigenous, cargo-carrying water-craft, and the recruitment of an equally hardy corps of fighting boatmen to operate them. Together the batteaux and the "battoe men" permitted the successful exploitation of the strategic river corridors of New York as "avenues of empire" through the barrier mountain chain.

1. Col. Edward P. Hamilton, The French and Indian Wars ("Mainstream of America; New York, NY: Doubleday and Company, Inc., 1962), p. 10.
2. Ibid.
3. Ibid., p. 11.
4. Ibid.
5. Howard H. Peckham, The Colonial Wars, 1689-1762 (Chicago History of American Civilization; Chicago, IL: University of Chicago Press, 1964). Don Higginbotham, The War of American Independence: Military Attitudes, Policies, and Practice, 1763-1789 (Macmillan Wars of the United States; New York, NY: The Macmillan Company, 1971), and the forthcoming R.A. Preston and S.F. Wise, The War of 1812 (Macmillan Wars of the United States; New York, NY: The Macmillan Company, 199-).
6. On Fort Ticonderoga, Stephen H.P. Pell, Fort Ticonderoga: A Short History Compiled from Contemporary Sources (Ticonderoga, NY: Fort Ticonderoga Museum, 1985). On Fort William Henry, Stanley M. Gifford, Fort Wm. Henry: A History (Lake George, NY: Fort William Henry Association, 1955). On Fort Stanwix, John F. Luzader, Louis Torres, and Orville W. Carroll, Fort Stanwix: Construction and Military History, Historic Furnishing Study, Historic Structure Report (Washington, DC: National Park Service, 1976). On Fort Niagara, Brian Leigh Dunnigan, History and Development of Old Fort Niagara (Youngstown, NY: Old Fort Niagara Association, 1985).
7. See, for example, Brian Leigh Dunnigan, Siege - 1759: The Campaign Against Niagara (Youngstown, NY: Old Fort Niagara Association, 1986).
8. It was virtually flat-bottomed. Actually a slight camber, three inches over a length of thirty-four feet in the case of the Lake George batteaux, facilitated dragging the vessel over shallows. See Footnote 28.
9. "Sundry Acco. of Battows delivered in an Acct of Major General Johnson," dated 6 Aug. 1755. James A. Sullivan, Richard E. Day, Alexander C. Flick, et al. (eds.), Sir William Johnson Papers (14 vols.; Albany, NY: University of the State of New York, 1921-1965), Vol. I, pp. 839-840.
10. Howard Chapelle, American Small Sailing Craft: Their Design, Development and Construction (New York, NY: W.W. Norton & Co., 1951), p. 34.
11. William J. Morgan, ed., Naval Documents of the American Revolution (9 vols.; Washington, DC: U.S. Gov. Printing Office, 1964-1986), Vol. VI, p. 319.
12. Johnson Papers, Vol. I, Accounts for Bateaux, pp. 839-840.

13. Capt. Alexander Moneypenny, "Orderly Book," 30 June 1758, Bulletin, Fort Ticonderoga Museum, Vol. XII, No. 6 (Oct. 1970), 434.
14. Caleb Rea, The Journal of Dr. Caleb Rea (1758), Edited by Fabius Maximus Rea (Salem, MA: Essex Institute, 1881), 28.
15. Dennis M. Lewis, "Batteaux on the Champlain Waterway, 1755-1783," (Unpublished Research Report: New York State Museum, Div. of Research and Collections, 1983), 3-4. On the Davies painting, R.H. Hubbard, Thomas Davies c. 1737-1812: An Exhibition Organized by The National Gallery of Canada (Ottawa: The National Gallery of Canada, 1972), No. 13, The Rapids of the St. Lawrence, 1760, pp. 85-86, and Stephen Sears' commentary in American Heritage, Vol. XXIX, No. 4 (June/July 1978), 100.
16. Lewis, "Batteaux," 4.
17. Ibid.
18. Rea, Journal, p. 28.
19. Lewis, "Batteaux," 5.
20. Lewis, "Batteaux," 6-7.
21. Louis Antoine de Bougainville, Adventure in the Wilderness: The American Journal of Louis Antoine de Bougainville. Translated and edited by Edward P. Hamilton (Norman, OK: University of Oklahoma Press, 1964), p. 61.
22. John Lees, Journal of J.L. of Quebec, Merchant (Detroit, MI: Society of Colonial Wars of the State of Michigan, 1911), pp. 43-44.
23. Johnson Papers, Vol. I, Estimate of Ordnance and Stores, dated New York, April 30th 1755, pp. 479-482.
24. Moneypenny, "Orderly Book," 1 July 1758, Bulletin, Fort Ticonderoga Museum, Vol. XII, No. 6 (Oct. 1970), 436.
25. Josiah Goodrich, "Journal," Bulletin, Fort Ticonderoga Museum, Vol. XIV, No. 1 (Summer 1981), 46.
26. David Holden, "Journal of Sergeant Holden, 1760," Proceedings, Massachusetts Historical Society, Vol. XXIV (1889), 387-409.
27. Moneypenny, "Orderly Book," 3 July 1758, and Goodrich, "Journal," Bulletin, Fort

Ticonderoga Museum, Vol. XII, No. 6 (Oct. 1970), 438, Vol. XIV, No. 1 (Summer 1981), 51. This implies a technique quite different from the haphazardly loaded American batteau depicted in Arthur Shilstone's watercolor from the cover of the December 1987 Smithsonian magazine.

28. Johnson Papers, Vol. I, J. Wheelwright's List of Supplies, pp. 571-574, cited in Lewis, "Batteaux," 8.

29. Moneypenny, "Orderly Book," 23 June 1758, Bulletin, Fort Ticonderoga Museum, Vol. XII, No. 5 (Dec. 1969), 354, cited in Lewis, "Batteaux," 8.

30. Holden, "Journal," Proceedings of the Massachusetts Historical Society, Vol. XXIV (1889), 387-409, "Samuel Jenks, His Journal of the Campaign of 1760," Ibid., 2nd Series, Vol. V (1890), 352-391, cited in Lewis, "Batteaux," 8.

31. Lewis, "Batteaux," 10-11. Greater technical detail on these vessels are contained in a series of articles by John Gardiner: 1.) "Relics of 'Ghost Fleet' are Small Craft Bonanza," 2.) "Bateaus Played Key Role in American History," 3.) "Famous Boat Type in Transitional State," 4.) "Construction Details of Old Bateaux Show Basic Design with Variations," 5.) "Old Sketch Provides Clue to Batteau Shape," 6.) "Batteau 'Reconstructed' From Remains, Drawings," National Fisherman combined with Maine Coast Fisherman, Oct. 1966, Apr.-Aug. 1967.

On one of the remaining "batteaux clusters" at the south end of Lake George, see Atlantic Alliance Lake George Bateaux Research Team (Unpublished Field Report), "Batteau Prime, Wiawaka Site," (Lake George, NY: Atlantic Alliance for Maritime Heritage, 1987) as well as the video tape produced during the September 1987 Underwater Archeology Workshop during which batteaux in the Wiawaka cluster were photographed as they lie on the bottom of Lake George.

32. Lewis, "Batteaux," citing Admiralty Plan, Naval Docs., Vol. VI, p. 319.

33. Lewis, "Batteaux," 11, citing Goodrich, "Journal," 47 and Jenks, "Journal," 365.

34. "State of the Battoes on Hudson River and Lake George," submitted by Lieut. Col. John Bradstreet to Maj. Gen. Jeffrey Amherst on 31 Dec. 1758, which reported 870 such craft in the Hudson/Champlain corridor, 1,084 in the Mohawk River and 1,500 additional craft to be constructed for the spring of 1759.

35. Lewis, "Batteaux," 12.

36. John Bradstreet, 1714-1774, Lieut. Col., 60th Regt. of Foot, and Deputy Quarter-Master General for North America. Bradstreet was born at Annapolis Royal, Nova Scotia, in 1714, the son of Lieut. Edward Bradstreet of Philipps' Regt. and Agathe de la Tour, a daughter of one of the first families of Nova Scotia.

Bradstreet was commissioned an ensign in his father's regiment from 23 Aug. 1735. During

years of garrison duty, he was able to capitalize on his French connections. His biographer, William Godfrey, points to evidence that he owned interest in a coasting schooner and was regularly engaged in clandestine and illegal trade with the French port of Louisbourg on Cape Breton Island.

At the outbreak of King George's War, Bradstreet was assigned to the garrison at Canso where he was captured at the surrender of that post in May of 1744. Taken to Louisbourg, he was sent in his schooner to Boston under flag of truce to negotiate the exchange of the Canso prisoners. In Boston he met Gov. William Shirley. "His arguments as to the vulnerability of Louisbourg were so forcible that Pepperell described him as the 'first projector of the expedition' that resulted in the capture of the stronghold in 1746." The ambitious Bradstreet sought command of the expedition and "maintained that he would have had the chief command had he been a native New Englander." Stanley M. Pargellis, "John Bradstreet," Dictionary of American Biography, Vol. II, 578-579.

In the event, Bradstreet was only able to obtain Shirley's commission as executive officer in Pepperell's provincial regiment, a post that he converted into the role of Pepperell's chief military advisor during the siege. Bradstreet was left at Louisbourg as military governor, a post he held until the city was returned to the French in 1749. During his tenure, Bradstreet was criticized for corruption and illicit trading. His hopes for reward in the wake of the Louisbourg triumph were also doomed to failure. Although praised by both Gov. Shirley and Gen. Pepperell, Bradstreet was able to obtain only a captaincy in the 51st Regt. of Foot (Pepperell's). He was also named Lieut. Gov. of the outpost of Saint John's, Newfoundland, where he remained until 1754, bitter and disappointed.

The renewal of war in 1754 offered renewed hope for "a driving personal ambition which was his dominating characteristic." [DAB, Vol. II, 578] Also renewed was his relationship with Sir William Shirley, his first patron. In early 1755, Bradstreet was ordered to Oswego with two companies of the 51st to reinforce the exposed garrison, a detachment of the New York Independent Companies, and to supervise the construction of boats on Lake Ontario intended for Shirley's campaign against Fort Niagara.

37. Sir William Shirley, The Correspondence of William Shirley, Governor of Massachusetts and Military Commander in America, 1731-1760. Edited by Henry Lincoln, (2 vols.; New York, NY: National Society of Colonial Dames of America, 1912), Vol. II, pp. 419-422, 442-445, 567-571.

38. Douglas Edward Leach, Arms for Empire: A Military History of the British Colonies in North America, 1607-1763 (The Macmillan Wars of the United States; New York, NY: The Macmillan Company, 1973), p. 381.

39. Sir William Shirley, The Conduct of Maj. Gen. Shirley, Late General and Commander-in-Chief of His Majesty's Forces in North America, Briefly Stated (London, 1758), cited by Leach, Arms for Empire, Note 78, pp. 409-410.

40. Minutes of a Council of War held at Oswego, Sept. 18, 1755, Shirley Correspondence, Vol. II, pp. 264-268, Leach, Arms for Empire, p. 69.

41. William G. Godfrey, Pursuit of Profit and Preferment in Colonial North America: John

Bradstreet's Quest (Waterloo, Ontario: Wilfrid Laurier University Press, 1982), Note 51, p. 76. Also the same author's "John Bradstreet: An Irregular Regular, 1714-1774," Unpublished Ph.D. Dissertation: Dept. of History, Queen's University, Kingston, Ontario, 1979 and Charles R. Canedy III, "An Entrepreneurial History of the New York Frontier, 1739-1776," Unpublished Ph.D. Dissertation: Dept. of History, Case Western Reserve University, 1967, pp. 42-43, 96.

42. Godfrey, Bradstreet, pp. 76-78.

43. Letter of John Bradstreet to Sir William Shirley, 6 April 1756, Bradstreet MSS., cited by Godfrey, Bradstreet, p. 77.

44. Letter of John Bradstreet to Sir William Johnson, 9 April 1756, Johnson Papers, Vol. IX, pp. 423-424.

45. Patrick Mackellar, "A Journal of the Transactions at Oswego from the 16th of May to the 14th of August 1756," in Stanley M. Pargellis, Ed., Military Affairs in North America, 1748-1765: Selected Documents from the Cumberland Papers in Windsor Castle (New York, NY: D. Appleton-Century Company, 1936), pp. 187-189, 200.

46. Godfrey, Bradstreet, p. 79.

47. Mackellar, "Journal," Military Affairs, p. 200.

48. Ibid.

49. Bougainville, Journal, p. 6, Godfrey, Bradstreet, pp. 79-80.

50. New York Mercury, 26 July, 2 Aug. 1756.

51. Godfrey, Bradstreet, p. 80.

52. Johnson Papers, Vol. IX, Minutes of a Council of War held at Albany, July 16, 1756, p. 486, Memorial of John Bradstreet to Lord Loudoun, dated 7 Aug. 1756, Henry E. Huntington Library, Loudoun Papers, LO 1536, and an "Account of Money paid by John Bradstreet to the Several Companies of Batteau-Men," cited in Godfrey, Bradstreet, pp. 82, 90.

53. Godfrey, Bradstreet, pp. 90-91.

54. John Bradstreet, "Proposal for raising local troops," 3 December 1757, Loudoun Papers, LO 4164.

55. Ibid.

56. Godfrey, Bradstreet, pp. 106-107.
57. Ibid.
58. Ibid., pp. 116-118.
59. Joseph F. Meany Jr., "Merchant and Redcoat: The Papers of John Gordon Macomb, 1757-1760," Unpublished Ph.D. Dissertation, Dept. of History, Fordham University, 1989, Headnotes VIII, IX, X.
60. Ibid., Headnote XII.
61. Godfrey, Bradstreet, p. 143.
62. Canedy, "Entrepreneurial History," p. 321, Godfrey, Bradstreet, p. 151.
63. John Bradstreet to Jeffrey Amherst, 4 Feb. 1760, cited by Godfrey, Bradstreet, p. 153.
64. Ibid., p. 153.
65. Ibid., p. 155.
66. Ibid., pp. 166-168, 238-239.